DOCUMENT RESUME

ED 265 684 EC 181 373

AUTHOR Majsterek, David
TITLE Alternative Assessment Techniques for High Risk Preschoolers.
PUB DATE [83]
NOTE 14p.
PUB TYPE Reports - Descriptive (141)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Disabilities; Evaluation Methods; *Handicap Identification; High Risk Persons; *Preschool Children; Preschool Education; Screening Tests; *Student Evaluation

ABSTRACT

Alternative systems are suggested for appraising preschoolers for possible inclusion in early special education programs. Frequency sampling, in which diagnosticians analyze performance of certain tasks predictive of school performance, are seen to be potentially valuable but lacking in accuracy. Examination of co-occurrences--interactions between the child and the environment--is suggested as one way to view children's abilities and disabilities. Additional diagnostic approaches described are play assessment, measurement of affective development, and appraisal of children's language acquisition. The alternatives are explained to mirror cognitive development. (CL)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
✓ This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

ED265684

Alternative assessment techniques for high risk preschoolers.

David Majsterek

New Mexico State University

EC181373

BEST COPY AVAILABLE

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

David Majsterek

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

Alternative Assessment Techniques for High Risk Preschoolers

Special educators often discover in a child study team meeting that students sharing similar assessment test scores may each qualify for different services within a district. Various factors may contribute to this situation. Duffey, Salvia, Tucker and Ysseldyke (1981) note that for less severe handicapping conditions like emotional disturbance, learning disabilities, mental retardation, and minimal brain dysfunction, the symptoms are as much a result of cultural diversity as the handicap. Since acculturation is reflected in the results of assessment testing (Salvia & Ysseldyke, 1978) diagnosticians must be sensitive to the limitations of tests which are employed to identify high risk preschoolers.

Assessment instruments are based on sampling techniques and probability. An examiner may be ninety-five percent confident that a particular score or group of scores indicates some intelligence range. However, this same examiner cannot conclude with certainty that a subject does not fall out of this range. More certainty is achieved when the test range is increased but at the cost of making these results more general and less useful. Kaufman (1979), in examining the WISC-R, considers this test to be only contributory to an overall appraisal of a subject's general ability. Yet, identification of mentally retarded students in the school environment generally rests on some qualifying intelligence test quotient. Since reliability (how consistently a test measures

BEST COPY AVAILABLE

the target behavior) of many norm referenced tests has been questioned (Ysseldyke & Salvia, 1974), placement of students based on these tests may be done erroneously.

Recently, problems with assessment have been considered by Bennet as they relate to the current status of Special Education (1983). Bennet addresses three issues surrounding the administration and use of assessment tests. First, the diagnostician (psychometrician or psychologist) must possess certain qualifications. However, without adequate research to identify necessary qualifications, certification does not guarantee quality examiners.

Secondly, Bennet considers the validity of the diagnostic instruments employed. Since these tests have been designated for identifying handicapped populations, he questions the fact that "test authors and publishers have typically presented evidence for the adequacy of their instruments gathered from general samples" (p. 112). While many tests used to diagnose handicapping conditions are good predictors of academic performance for normal children, their ability to generalize to handicapped children is questionable. Further, the practice of using WISC-R subtest scatters to indicate individual cognitive strengths and weaknesses is questioned (Duffey et. al., 1981).

The third important consideration in diagnostic testing is fair or unbiased implementation. It has been shown that ethnic and racial minorities are overrepresented in programs for

mentally retarded and learning disabled students (Mercer, 1973; Tucker, 1980). This disproportionately high referral rate for minority students to EMR classrooms and a similarly high representation of these same students enrolled in EMR programs "calls into question whether the third basic requirement for assessment is being met" (p. 114). Recently, attempts to standardize the reporting of abilities tests' results has taken the form of microcomputer assisted reporting. Programs are available for both the Kaufman and WISC-R which yield a standardized printout indicating statistical significance of test results. Information includes ninty-five percent confidence range as well as the statistical relationships of individual scores to norm groups. While this method provides more consistent interpretation across examiners it reflects only one theoretical interpretation and does not guarantee valid, research founded predictability and accurate administration.

Assessment Alternatives

If diagnostic practices fail to meet these requirements of fairness and validity for school aged students, how much more significant is the issue for early identification of preschool high risk students. Children placed into classrooms designed for slow achievers are apt to remain in special classes throughout their school life. Since "there is little evidence of significant improvement in skill areas, especially when more mildly handicapping conditions are involved" (Duffey, p. 432),

it is incumbent upon special educators working in preschool programs to generate, through sound research, equitable procedures and materials for identification if the least restrictive educational alternative is to be selected.

Frequency Sampling

One technique which has been suggested as a means for more valid diagnosis employs frequency sampling of certain tasks as they predict school performance (Magliocca, Rinaldi, Crew & Kunzleman, 1977). Using this technique, diagnosticians present a variety of tasks for preschoolers to perform in a screening situation. This could be a Child Find prescreening program done annually. The child's age, sex, position in family etc. could be recorded during the screening along with performance on the given tasks and social interactions with the examiners. Tasks may include drawing circles, naming colors, connecting dots etc. By its nature this type of study must be more long term, as comparisons are made between later school performance and screening information. However, results may be less subject to the effect of bias.

Such procedures can serve to generate much valuable information for diagnosing preschool students. States might generate a list of tasks and offer grant incentives for districts that contribute to the data base. However, while potentially valuable, such programs fail to meet the need for more accurate diagnosis, now. The remainder of this paper considers some standards, already in place, against which the performance of high risk preschoolers

BEST COPY AVAILABLE

can be compared.

Coocurrences

One such assessment technique for identifying high risk children who are in their first two years of life is the suggested by Brinker and Lewis (1982). Contending that "infants should be regarded as busy, purposeful and competent", these writers suggest looking at "the interaction of the infant with the environment... as the fundamental adaptive act of the newborn" (p. 2). Interactions between the organism and the surrounding environment are termed cooccurrences. Cooccurences consist in a child's response to various stimuli in the environment.

Detection of these coocurrences is a necessary function of growth and is dependent upon sensory perception and short and long term memory. As such, comparison of the degree to which a young child uses coocurrences in gaining mastery over the environment permits the assessor an opportinity to view their abilities and disabilities. In their article, Brinker and Lewis cite research in child development literature which compares normal and non-normal developmental patterns. Disabled learners are characteristically delayed in the acquisition of more sophisticated means for interacting with their environment.

Comparison to a normed patterns does not erradicate the cultural and social factors which contribute to normal development. Similarly, assessors evaluating individual children may still be subject to personal biases. While much needs to be done to consoli-

date the constantly growing body of developmental research into a meaningful format, this approach to diagnosing high risk preschoolers is alternate evaluation method which may add a different perspective to assessment.

Play

Another diagnostic window suggested for considering the high risk preschooler is play. Play has been considered as it relates to various Piagetian stages of growth and comparisons of non-normal children to normal children have been described (see Garwood, 1982). As the child develops cognitively, play behavior also changes in complexity. Garwood notes that "According to Piaget, the development of intelligence is aided by development of both imitation and play behaviors" (p. 4). He further asserts that different behaviors can be sampled using play scales with normally as well as atypically developing children.

A benefit of using play assessment is that it establishes a series of objectives toward which intervention can be directed. Not only can subsequent steps in the development of the child's play behavior be the focus of instruction but recognition of the child's limitations in the preschool environment is important in curriculum design.

Assessment can be done in a more natural setting which may provide a more realistic picture of the child's social and cognitive skills. One observation technique which has been used is to have the child interact with the mother in a play situation (Brooks-

Gunn & Lewis, 1982). Observations like these have the potential to give much information on how a child is functioning in a natural setting. The biases which can affect diagnosticians may not be felt so strongly. Labov (1970) has pointed out that for Black children, evaluation in a more familiar atmosphere yields results which are less negative than when these evaluations are done in school.

Affective Development

A source of developmental information which may contribute to more valid assessment of preschoolers has been described by Jens and Johnson (1982). They considered affective development as another measure of a child's cognitive level. In their review of research they describe the developmental sequence of affect as relatively similar for all individuals. Citing research on Downs syndrome children they state that "the development of these responses... progresses in the same sequence as in nonhandicapped children but with delays congruent with delays in cognitive development" (p. 19).

The advantage of this type of assessment resides in the fact that it can be done with very young children in a natural setting. However, some data is based on experiments done in more structured environments using a plexiglass covered table that has a deep and a shallow side. In spite of these difficulties, the information gathered about children using affective measures may afford the examiner another valuable insight into the preschooler's cognitive level of functioning.

Language Development

The focus here is in examining the application of language research to assessment techniques. A large body of information already surrounds language development (see Leonard, 1982). Yet language acquisition is largely the domain of Speech and Language researchers, and information about the child's level of mastery may often not be treated as a critical indication of a child's cognitive functioning level by school district child study teams.

Reading theorists have asserted that thinking and cognitive development are integrally related to language development (Pearson & Johnson, 1976; Schafer, Staab, & Smith, 1983). A better understanding of childrens' levels of acquisition can provide a clearer picture of their level of cognitive functioning. For example, speech acquisition for the language delayed preschooler parallels that of normal preschoolers in syntax, semantics and pragmatics. This development further parallels the development of symbolism described in Piaget's cognitive stages (Bates, Camaioni, & Volterra, 1975). Some researchers have examined the development of questioning strategies used by students. Their development functionally reflects the general developmental sequence of other language assessment techniques discussed here. This assessment technique can also be performed in a natural environment. However, a sensitivity to nonstandard English, dialect, and cultural factors, must accompany such assessment programs in order to assure unbiased appraisal.

Summary

Since certain limitations surround the current practice of

appraising preschoolsers for possible inclusion in early Special Education programs, alternative systems were suggested. These include frequency sampling, examining coocurrences, and play, affective and language development. The first method is dependent upon ongoing appraisal of the assessment instruments. This appraisal of subtest performance considers which subtest scores are indicative of difficulties in school and attempts to use these to more adequately predict the success of other students. The other assessment methods are based on research which indicates that below normal development parallels normal development but proceeds at a different rate. These last comparison methods are based upon research findings for normal children's performance. One of their assessment advantages consists in the fact that data can be collected in a more natural setting. Not only does this provide a more natural picture of the child's abilities but it also avails the examiner of a better picture of how environment plays a role in a possible handicapping condition.

Each alternative considers cognitive development to be mirrored in the sampled behaviors. This paper does not intend to promote any single method as a stand alone evaluation technique. Instead, further research on assessment is called for which employs all these, and perhaps more, techniques. It is suggested that any assessment tools that may evaluate various components of cognitive development in the preschooler should be considered when attempting to find the least restrictive educational alternative for a pre-

BEST COPY AVAILABLE

school child.

References

Bennet, R. E. Research and evaluation priorities for special education assessment. Exceptional Children, 1983, 50, 110-117.

Biles, E., Camaioni, L., & Volterra, V. The acquisition of performatives prior to speech. Merrill-Palmer Quarterly, 1975, 21(3), 205-226.

Brooks-Gunn, J., & Lewis, M. Development of play behavior in handicapped and normal infants. Topics in Early Childhood Special Education, 1982, 2(3), 14-27.

Brinker, R. P., & Lewis, M. Discovering the competent handicapped infant: A process approach to assessment and intervention. Topics in Early Childhood Special Education, 1982, 2(2), 1-16.

Duffey, J. B., Salvia, J., Tucker, J., & Ysseldyke, J. E. Non-biased assessment: A need for operationalism. Exceptional Children, 1981, 47, 427-434.

Garwood, S. G. Piaget and play: Translating theory into practice. Topics in Early Childhood Special Education, 1982, 2(3), 14-27.

Greenfield, P. M., & Smith, J. H. The structure of communication in early language development. New York: Academic Press, 1976.

James, S. L., & Seebach, M. A. The pragmatic function of children's questions. Journal of Speech and Hearing Research, 1982, 25, 2-11.

Jens, K. G., & Johnson, N. M. Affective development: A window to cognition in young handicapped children. Topics in Early

BEST COPY AVAILABLE

Childhood Education, 1982, 2(2), 17-24.

Kaufman, A. S. Intelligent testing with the WISC-R. New York: John Wiley & Sons, 1976.

Labov, W. The logic of non-standard English. In F. Williams (Ed.) Language and poverty. Chicago: Markham, 1970.

Leonard, L. B. Early language development and language disorders. In G. Shames & E. Wiig (Eds.) Human communication disorders. Columbus, Ohio: Charles Merrill, 1982.

Magliocca, L. A., Rinaldi, R. T., Crew, J. L., & Kunzleman, H. P. Early identification of handicapped children through a frequency sampling technique. Exceptional Children. 1977, 43, 414-420.

Mercer, J. R. Labeling the mentally retarded: Clinical and social system perspectives on mental retardation. Berkeley, California: University of California Press, 1973.

Pearson, P. D., & Johnson, D. D. Teaching reading comprehension. New York: Holt, Rinehart & Winston, 1976.

Salvia, J., & Ysseldyke, J. E. Assessment in special and remedial education. Boston: Houghton-Mifflin, 1978.

Shafer, R. E., Staab, C., & Smith, K. Language functions and school success. Glenview, Illinois: Scott, Foresman, 1983.

Tucker, J. A. Ethnic proportions in classes for the learning disabled issuing on non-biased assessment. Journal of Special Education, 1980, 14, 93-105.